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For more information, contact
MIT Global SCALE Network

Postal Address:
Massachusetts Institute of Technology 77
Massachusetts Avenue, Cambridge, MA 02139 (USA)

Location:
Building E40, Room 267
1 Amherst St.

Access:
Tel: +1 617-253-5320
Fax: +1 617-253-4560

Email: scale@mit.edu
Website: scale.mit.edu

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The Theory and Reality of Newsboy Contracts in the US
Micah A. North-Shea

For Full Thesis Version Please Contact:

Marta Romero

ZLOG Director

Zaragoza Logistics Center (ZLC) Edificio

Náyade 5, C/Bari 55 – PLAZA 50197

Zaragoza, SPAIN

Email: mromero@zlc.edu.es

Telephone: +34 976 077 605

The Theory and Reality of Newsboy Contracts in the US

Micah A. North-Shea

EXECUTIVE SUMMARY

In theory, there is no difference between theory and practice; in practice, there is.
~Chuck Reid~

The ‘Economic Order Quantity’ and ‘Newsboy’ models lay the foundation for most solutions in inventory theory. The latter gained an unusual amount of popularity in supply chain literature and spread to numerous other academic disciplines. The model is but one example from operations research of a real world problem, limited by simplifying assumptions, and solved mathematically and like most simplified models used in academia, the newsboy problem is easier to ‘solve’ than to implement.

In the traditional newsboy problem, a ‘boy’ must decide how many papers to purchase from a publisher at the beginning of the day. He must then try to sell the papers throughout the day. When too many papers are ordered, the newsboy will eat the losses on the unsold copies; when too few are ordered, the newsboy will not meet demand and may permanently lose customers.

With this composition we attempt to comprise a parallel historical analysis of the newsboy-publisher relationship in actuality and the newsboy model in academic literature to provide an example of the links and disconnects of pedagogic and realistic progress. In doing so we answer many questions including the following:

- **Did newsboys actually face the newsboy problem?**
Yes, but their relationship with publishers included more variables than the original version including competition and a severe power differential.
- **Was the newsboy model developed for the newspaper industry?**
No. Operations researchers developed the newsboy model to optimize inventory decisions for the United States Navy and Air Force. Moreover, the model is rarely applied to the newspaper industry.

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- **Did the development of the newsboy model coincide with the rise of newsboys?**

No. The newsboy model, developed during World War II (1939-1945), came towards the end of newsboys' abundant existence. As the use of newsboys decreased, literature on the model increased. The inventory decision at the heart of the problem, however, remain in the industry; retailers, such as grocers and coffee shops, still buy papers at wholesale and have to decide how many papers to stock. Regardless, the proliferation of newsboy articles has not coincided increasing use of newsboy contracts in the newspaper industry.

- **Does the industry use the model to improve newsboy type relationships?**

No. The newsboy-publisher relationship has never been close to the mathematically optimal relationship. Newspapers have alternated between not allowing returns and allowing full-returns. Both of these have been proven to be numerically sub-optimal.

It was a collection of legal (e.g. the US Postal Act of 1912), technological (e.g. new printing technology creating a feasible printing press), social (e.g. activists fighting for newsboy's rights) and economic (e.g. consolidation of distributors and cartels of newspapers) changes that shaped the newsboy contract over the years. We propose that, because the newsboy contract and most other contracts are shaped by far more than numbers, a better understanding of the historical events that shaped any given industry will help link academic research with practical application.

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